





DATE MAILED: 01/08/2002

APPLICATION NO.	F	ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
09/086,627	05/29/1998		VERNON K. BOLAND	7675	8488
26890	7590	01/08/2002			
JAMES M.	STOVE	R	EXAMINER		
NCR CORPORATION 1700 SOUTH PATTERSON BLVD, WHQ4				EDELMAN, BRADLEY E	
DAYTON, OH 45479				ART UNIT	PAPER NUMBER
				2153	

Please find below and/or attached an Office communication concerning this application or proceeding.

1,6

	Application No.	Applicant(s)	
Advisory Action	09/086,627	BOLAND, VERNON K.	
Advisory Action	Examiner	Art Unit	
	Bradley Edelman	2153	
The MAILING DATE of this communication	on appears on the cover sheet wi	th the correspondence address	
HE REPLY FILED 27 December 2001 FAILS To nerefore, further action by the applicant is requiral rejection under 37 CFR 1.113 may only be endition for allowance; (2) a timely filed Notice oxamination (RCE) in compliance with 37 CFR 1.	ed to avoid abandonment of this ither: (1) a timely filed amendme f Appeal (with appeal fee); or (3	s application. A proper reply to a ent which places the application in	
PERIOD F	OR REPLY [check either a) or b	p)]	
a) The period for reply expires 3 months from the mailir	·		
 The period for reply expires on: (1) the mailing date of event, however, will the statutory period for reply expir ONLY CHECK THIS BOX WHEN THE FIRST REPL 706.07(f). 	e later than SIX MONTHS from the mailir	ng date of the final rejection.	
Extensions of time may be obtained under 37 CFR 1.136(a) we been filed is the date for purposes of determining the period (CFR 1.17(a) is calculated from: (1) the expiration date of the solution and the period (CFR 1.17(a)) above, if checked. Any reply received by the Office later than the patent term adjustment. See 37 CFR 1.704(b).	of extension and the corresponding amous shortened statutory period for reply origina	unt of the fee. The appropriate extension fee under ally set in the final Office action; or (2) as set forth in	
A Notice of Appeal was filed on App 37 CFR 1.192(a), or any extension thereof			
☐ The proposed amendment(s) will not be en	tered because:		
(a) they raise new issues that would require	e further consideration and/or se	earch (see NOTE below);	
(b) they raise the issue of new matter (see	Note below);		
(c) they are not deemed to place the appli issues for appeal; and/or	cation in better form for appeal	by materially reducing or simplifying the	
(d) they present additional claims without NOTE:	canceling a corresponding num	ber of finally rejected claims.	
. Applicant's reply has overcome the followin	g rejection(s):		
Newly proposed or amended claim(s) canceling the non-allowable claim(s).	would be allowable if submitted	d in a separate, timely filed amendment	
i.⊠ The a)□ affidavit, b)□ exhibit, or c)⊠ req application in condition for allowance beca		en considered but does NOT place the	
. The affidavit or exhibit will NOT be conside raised by the Examiner in the final rejection		OLELY to issues which were newly	
 For purposes of Appeal, the proposed ame explanation of how the new or amended cla 			
The status of the claim(s) is (or will be) as f	ollows:		
Claim(s) allowed:			
Claim(s) objected to:			
Claim(s) rejected:			
Claim(s) withdrawn from consideration:	·		
R The proposed drawing correction filed on	is a) approved or b)	disapproved by the Examiner	

condition for allowance; (2) a timely filed Notice of Ap Examination (RCE) in compliance with 37 CFR 1.114 PERIOD FOR a) The period for reply expires 3 months from the mailing da The period for reply expires on: (1) the mailing date of this b) [_] event, however, will the statutory period for reply expire late ONLY CHECK THIS BOX WHEN THE FIRST REPLY W 706.07(f). Extensions of time may be obtained under 37 CFR 1.136(a). The have been filed is the date for purposes of determining the period of ex 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shorte (b) above, if checked. Any reply received by the Office later than three earned patent term adjustment. See 37 CFR 1.704(b). 1. A Notice of Appeal was filed on ____. Appella 37 CFR 1.192(a), or any extension thereof (37 2. The proposed amendment(s) will not be entered (a) they raise new issues that would require fu (b) they raise the issue of new matter (see Not (c) they are not deemed to place the application issues for appeal; and/or (d) they present additional claims without can NOTE: 3. Applicant's reply has overcome the following re 4. Newly proposed or amended claim(s) _____ wo canceling the non-allowable claim(s). 5. ☐ The a) ☐ affidavit, b) ☐ exhibit, or c) ☐ request application in condition for allowance because: 6. The affidavit or exhibit will NOT be considered raised by the Examiner in the final rejection. 7. For purposes of Appeal, the proposed amendm explanation of how the new or amended claims The status of the claim(s) is (or will be) as follow Claim(s) allowed: _____. Claim(s) objected to: _____ Claim(s) rejected: _____. Claim(s) withdrawn from consideration: _____. 8. ☐ The proposed drawing correction filed on _____ is a) ☐ approved or b) ☐ disapproved by the E 9. Note the attached Information Disclosure Statement(s)(PTO-1449) Paper No(s). 10. Other: ____ SLENTON B. BURGESS SUPERVISORY PATENT EXAMINER **TECHNOLOGY CENTER 2100**

U.S. Patent and Trademark Office



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DETAILED ACTION

This action is in response to Applicant's request for reconsideration after final filed on December 27, 2001. Claims 1-16 are presented for further examination.

Response to Arguments

In response to Applicant's request for reconsideration filed on December 27, 2001, the following arguments are noted:

- a. The idea of allowing "the most important network distributed processes to be assured available resources" is not well known in the art.
- b. There is needed a suggestion or motivation that a single-computer-system resource-allocation scheme, such as the one taught by Culbert, is modifiable or adaptable to distributed network environments.
- c. It is impermissible to modify the Culbert system, i.e. to reallocate resources wholly irrespective of an amount of computer resources necessary for low-priority processes to run on the computer network, in a manner that runs counter to the requirements of the Culbert system itself.

In considering (a), Applicant contends that the idea of allowing "the most important network distributed processes to be assured available resources" is not well known in the art. Examiner respectfully disagrees. Applicant further requested that the Examiner provide a reference to show that such a motivation is well known in the art. It is not necessary to supply a separate reference because the Culbert reference itself



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includes the function of supplying required resource utilization parameters necessary for tasks to function properly (col. 7, lines 49-51), and degrading the system as much as possible *while still providing the needed resources* (col. 9, lines 52-54), and also discusses prioritized tasks wherein certain tasks are given priority over others in utilizing resources (col. 9, lines 24-32). These features clearly suggest the desirability of assuring that the most important processes in computer system are allocated with sufficient resources to function properly.

In considering (b), Applicant contends that there is needed a suggestion or motivation that a single-computer-system resource-allocation scheme, such as the one taught by Culbert, is modifiable or adaptable to distributed network environments.

Examiner respectfully disagrees. In response to this argument, note that the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). Here, one of the key features of Applicant's invention is a guaranteed minimum resource allocation for particular processes on a network. The idea of guaranteed minimum resource allocation for particular processes is clearly well known, as evidenced by the above described Culbert reference (Applicant has stated in the response after-final that the system taught by Culbert "guarantee[s] minimum resource

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allocation for processes . . ." [see page 6 of Applicant's response after final, and Culbert, col. 9, lines 47-54]). Thus, regardless of the system in which it is used, the idea and feature of including a guaranteed minimum resource allocation to processes in a computer system is well known. It thus would have been obvious to include such a feature in any resource allocation system, such as a resource allocation system for distributed processes across a computer network, because the guarantee inherently provides the most important processes with available resources.

In considering (c), Applicant contends that it is impermissible to modify the Culbert system, i.e. to reallocate resources wholly irrespective of an amount of computer resources necessary for low-priority processes to run on the computer network, in a manner that runs counter to the requirements of the Culbert system itself. Examiner respectfully disagrees. Primarily, the Culbert system can be modified in any way that might be desirable to a designer of the system. Culbert has opted to allow low-priority processes to always maintain some amount of allocated resources for proper performance. However, Culbert could have just as easily designed the system to allow lower priority processes to be completely overridden by higher priority processes. For instance, the priority of the low-priority tasks could have been set to zero, or the minimum resources necessary could have been set to zero. Either way, the choice to completely override low-priority processes instead of protecting some minimum resource allocation for these low-priority tasks is not an inventive step, but is simply a choice of design regarding a desired level of resource allocation. Therefore, it would be

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permissible, and even desirable, to reallocate resources in the Culbert system wholly irrespective of an amount of computer resources necessary for low-priority processes to run, if the only important processes for which a designer desires to allocate resources are high-priority processes.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bradley Edelman whose telephone number is (703) 306-3041. The examiner can normally be reached on Monday to Friday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glen Burgess can be reached on (703) 305-4792. The fax phone numbers for the organization where this application or proceeding is assigned are as follows:

For all After Final papers: (703) 746-7238.

For all other correspondences: (703) 746-7239.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-3900.

BE December 31, 2001 GLENTON B. BURGESS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100